ABSTRACT

An electric power generation system is disclosed, which includes a back-up electric power generator driven by a four-cycle internal combustion engine. The engine includes a plurality of reciprocating cylinders each rotatably coupled to a crankshaft, which drives the electric power generator. The engine also includes a compressor along an intake pathway to deliver pressurized air to the cylinders and a turbine along an exhaust pathway to power the compressor when driven by exhaust discharged from the cylinders. The engine is prepared to accept a generator load by increasing boost pressure provided by the compressor. This increase is accomplished by skip-firing the cylinders in a selected pattern, retarding ignition timing for the cylinders, or a combination of these techniques. A unique skip-fueling control pattern is also disclosed.